# Code Book

The following variables are used in the script:

url: a character variable containing the URL of the dataset to be downloaded.

filename: a character variable containing the name of the zip file to be downloaded.

**train\_x:** a data frame containing the training set of features.

**train\_y:** a data frame containing the training set of activity labels.

**train\_subject:** a data frame containing the training set of subject identifiers.

**test\_x:** a data frame containing the test set of features.

**test\_y:** a data frame containing the test set of activity labels.

**test\_subject:** a data frame containing the test set of subject identifiers.

**value:** a data frame resulting from binding the train\_x and test\_x data frames.

**activity:** a data frame resulting from binding the train\_y and test\_y data frames.

**subject:** a data frame resulting from binding the train\_subject and test\_subject data frames.

**features:** a data frame containing the feature labels.

**mean\_std\_features:** an integer vector containing the indices of the feature labels that represent mean and standard deviation measurements.

**mean\_std\_features\_wlabel:** a data frame containing the feature labels for mean and standard deviation measurements.

**data\_filtered:** a data frame containing the selected mean and standard deviation features, along with their corresponding activity and subject.

**activity\_labels:** a data frame containing the labels for the six activity types.

**names(data\_filtered):** a character vector containing the column names of the data\_filtered data frame after performing variable renaming operations.

**tidy\_data:** a data frame containing the mean values of the selected mean and standard deviation features, grouped by subject and activity.